DVB cable receiver UFC 762si/sw

Made in Germany

Qualität aus Deutschland

KATHREIN
Antennen · Electronic

PREFACE

Dear customer,

This Operating Manual is intended to help you make the fullest use of the extensive range of functions offered by your new cable receiver.

We have tried to make the operating instructions as easy as possible to understand, and to keep them as concise as possible.

If you will not be using your receiver for an extended period, you should use the power switch to disconnect it from the power supply to save energy. For shorter breaks, you can use the remote control to switch the receiver to standby, which uses only a minimal amount of energy.

We wish you good reception and much pleasure using your new DVB C receiver.

Your

KATHREIN team

RECEIVER FEATURES

The receivers UFC 762si and UFC 762sw are suitable for the reception of digital cable TV and radio channels.

The decoding systems for Conax and Cryptoworks are already integrated. In addition one Common Interface for a CA module is provided for decoding additional Pay-TV channels.

Despite their small size, these receivers have a comprehensive range of features, such as electrical and optical audio output for Dolby Digital (AC 3), Teletext with memory for 800 pages, and a 16-character alphanumeric display for showing the channel names.

PRODUCT PACKAGE

- UFC 712si (silver) and UFC 712sw (black)
- Remote control RC 662
- Scart cable
- 2 Batteries AAA 1.5 V
- Power supply cable
- Operating Manual
- Safety Instructions

IMPORTANT INFORMATION

The channels available are subject to continual change in the cable network. Accordingly it is necessary to update the channel presets when changes are made. The information for this reset can be found on the Internet or in relevant magazines.

Your receiver is factory fitted with the latest software version. We are, however, constantly working on adapting the software to the wishes of our customers and to developments in technology. The "Software Update" section provides more information on this.

Please keep the original packaging in case you need to return the product at any time.

In order to disconnect the UFC 762 from the mains completely, the mains plug must be unplugged from the wall socket! Therefore place the UFC 762 near to a wall socket and make sure the socket is accessible, so that at any time (e.g. during a thunderstorm or during a long absence) you can disconnect the receiver from the mains.

DISPOSAL INSTRUCTIONS

Electronic equipment is not domestic waste - in accordance with directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL dated 27th January 2003 concerning used electrical and electronic appliances, it must be disposed of properly.
At the end of its service life, take this receiver for disposal at a designated public collection point.

Used batteries are special waste.
Do not throw spent batteries into your domestic waste; take them to a collection point for used batteries.

REFERENCE NOTE ON AUDIO MPEG INC. AND S.I.SV.EL, S.P.A:

This device employs legally protected technologies which are protected by patents in the USA as well as by intangible property laws in other countries.
Audio MPEG Inc. and Societa' Italiana per lo sviluppo dell'elettronica, S.I.SV.EL, S.P.A, have granted KATHREIN-Werke KG rights of use which are subject to certain restrictions. These restrictions must also be observed by you as a customer.
According to these, this device is only to be used by end customers for private, non-commercial purposes and for licensed content. Use for commercial purposes is not authorised. Utilisation of products or procedures sold or used with this device are not comprehended. With reference to licensed technologies, application of reversible procedures as well as dismantling of the device are both not permitted.

CONTENTS

CONTENTS

SAFETY INSTRUCTIONS

This page contains important information about the operation, installation location and connection of the unit. Read these instructions carefully before starting to use the unit.

DANGER!

Mains cable

Make sure that the mains cable (power supply cable) is not damaged. Units with a damaged mains cable must be disconnected from the mains (disconnect mains connector) and repaired by a qualified engineer before setup. Only use the power pack supplied (if available)!

Risk of death due to electric shock!

Cleaning

Disconnect the mains connector before cleaning the unit. Only use a dry cloth for cleaning and only clean the outer surface. Never open the unit.

Touching the parts inside the unit carries a risk of death due to electric shock!

Playing children

Make sure that children do not push any objects into the ventilation slots.

Risk of death due to electric shock!

WARNING!

Earth connection

The antenna system must be earthed as specified or equipotentially bonded. EN 60728/11 and any national regulations must be complied with.

Danger due to surge voltages, lightning strikes!

Mains voltage

Only operate the unit with the specified mains voltage (marked on the rear of the-unit or on the external power pack)! The unit may only be connected to the mains and turned on once it has been connected to the antenna and to the TV set or the cable network and PC.

If the mains voltage is too high, there is a risk of fire!

Repairs

Ensure that any repairs to your unit are carried out by qualified personnel. Opening the unit and attempting to repair it yourself voids all warranty claims!
Improper work on the unit can jeopardise the electrical safety of the unit.

The manufacturer accepts no liability for accidents caused by the user opening the unit!

CAUTION!

Connections

Incorrect wiring of the connections can lead to malfunctions or defects on the unit!

Long periods of absence/storms/accessibility of the mains connector

Always turn off the unit at the mains switch if you will be absent for a long time or there is a storm. Disconnect it from the mains by unplugging the mains connector. This also applies to the other equipment connected to the unit. Isolation from the cable network is also recommended. Note any timer programs (receiver) and turn the unit on again promptly before the recording time. Ensure the mains connector is accessible at all times.

Installation location

All electronic equipment generates heat. However, the heating of this unit lies within the permissible range. Sensitive furniture surfaces and veneers may become discoloured by the effects of constant heat over time. The feet of the unit can also cause colour changes to treated furniture surfaces. If necessary, place the unit on a suitable stable and flat base!

Ventilation

The heat generated in this unit is adequately dissipated. However, the unit should never be installed in a cupboard or on shelves with inadequate ventilation. Never cover the cooling slots on the unit (e.g. with other equipment, magazines, tablecloths or curtains)!

Do not place any objects on top of the unit and maintain a clearance of at least 10 cm above the unit, so that the heat generated can be dissipated with no obstructions.
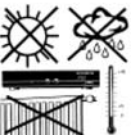
Moisture, sunlight, heat, naked flames

Protect the unit against moisture, dripping and splashed water (do not place any filled objects such as vases on top of the unit). Do not place the unit close to a heater or expose it to direct sunlight and do not operate it in damp locations. Only use the unit in a moderate climate, not in tropical conditions! Do not expose the unit to any naked flame, such as from a candle! This constitutes a fire hazard!

CONNECTION AND SET-UP

The following section is intended specifically for specialist dealers. You need not refer to this section unless you are carrying out the installation yourself. The "Connection Example" section provides a sample configuration.
Do not connect the receiver to the mains until all installation work has been properly carried out. Refer also to the information in the "Safety Instructions" section.
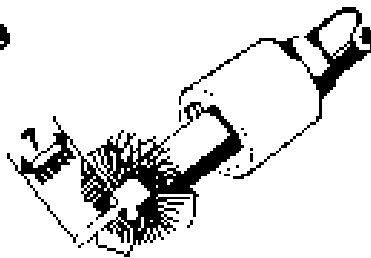
CONNECTING THE RECEIVER

RF(HF) CONNECTION

Connect the RF input of the receiver to the antenna socket.
Use a coaxial cable with a standard IEC connector. If the IEC connector is not yet fitted to the cable, strip the insulation from the cable as shown in the following illustration and carefully fit the connector on to the end of the cable so that it is securely fitted.
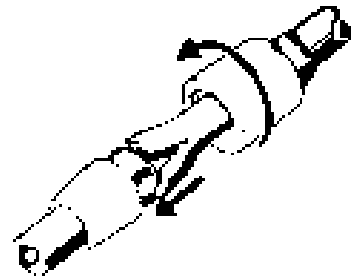
Lengthwise slits (3×)   **Bend back**   **Screw together**

When fitting the connector, make sure that no wires from the braiding are touching the inner conductor, otherwise a short circuit will occur.
The quality of the reception signal depends on this connection!

TV CONNECTION

Connect the cable receiver (TV Scart socket) to the TV set using a Scart cable. If your TV has a stereo feature, you can receive the sound in stereo via the Scart connection. Connect the cable receiver to the video/DVD recorder using a Scart cable.

### INSERTING BATTERIES INTO THE REMOTE CONTROL

Remove the cover on the rear of the remote control.
Insert the two batteries supplied into the remote control. Ensure correct polarity of the batteries; the + and – markings are indicated inside the battery compartment. Slide the cover back into the housing until it locks into place.
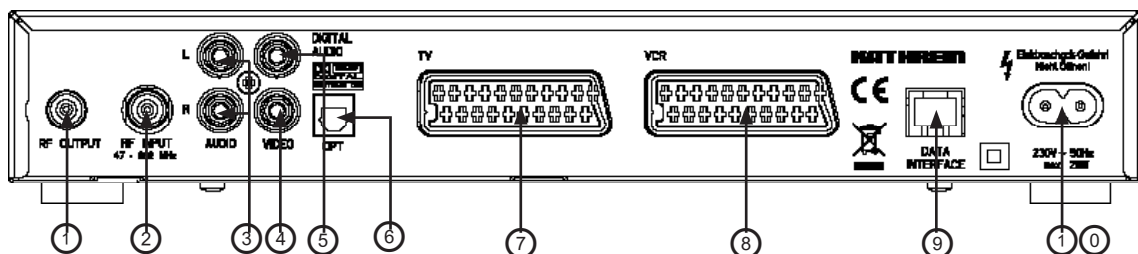
CONTROLS, DISPLAYS AND CONNECTIONS

This section provides a brief description of all the controls, displays and connections.

VIEW OF FRONT PANEL (FLAP FOLDED DOWN)
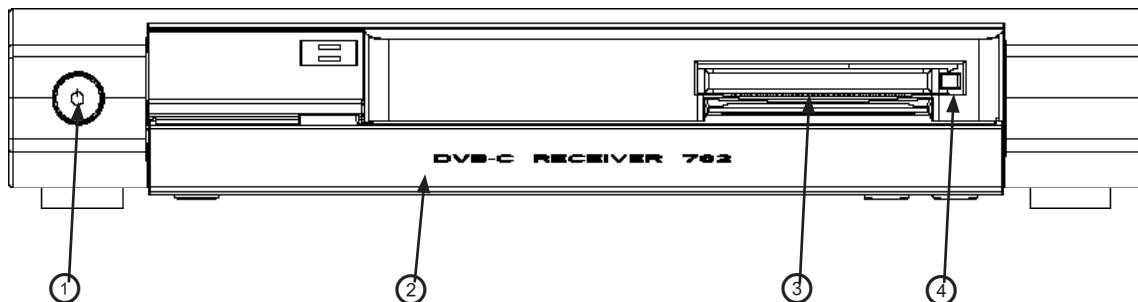
VIEW OF REAR PANEL

Front panel controls and displays

1. On/Off switch
2. Display (cover folded down)
3. Common Interface and Smartcard reader for accepting a CA module and for Pay-TV cards *)
4. Ejection button for the CA module

   In addition there are three further buttons on the front of the display
- TV/R button for switching between TV and radio mode
- Channel select buttons (▼▲)
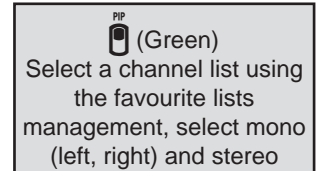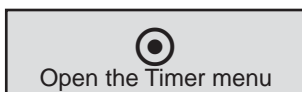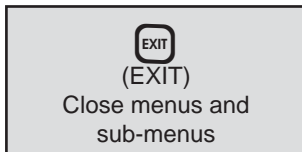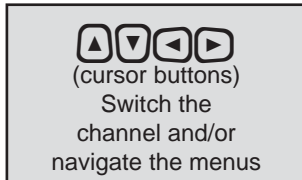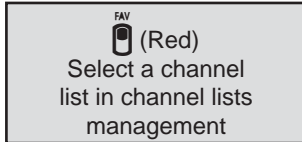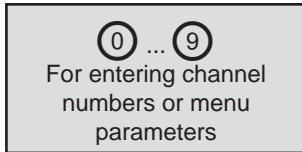
Rear panel controls and displays

1. RF(HF) loop-through output
2. RF(HF) input
3. Audio outputs (L/R) cinch sockets
4. Video output (composite colour)
5. Electrical data stream output (SPDIF/ Sony Philips Digital Interface Format) for Dolby Digital AC 3 audio
6. Optical data stream output (SPDIF/ Sony Philips Digital Interface Format) for Dolby Digital AC 3 audio
7. Scart socket for TV connection
8. Scart socket for VCR-/AUX connection
9. RJ 11 data interface
10. Mains power cable

*) CA module and Pay-TV cards (Smartcards) are not included

REMOTE CONTROL

REMOTE CONTROL FUNCTION BUTTONS

The button symbols presented here can also be found in the description of the operating steps.

⊗ Mute on/off

⓪ ... ⑨ For entering channel numbers or menu parameters

MENU Select main menu

FAV ▯ (Red) Select a channel list in channel lists management

Volume

▲▼◄► (cursor buttons) Switch the channel and/or navigate the menus

EXIT (EXIT) Close menus and sub-menus

◄◄ Currently not used

❚❚ Currently not used

► Currently not used

● Open the Timer menu

⏻ OFF mode (Stand-by)

PIP ▯ (Green) Select a channel list using the favourite lists management, select mono (left, right) and stereo

TEXT Select Teletext

OPT ▯ (Yellow) Open options menu

TV/R ▯ (Blue) Switch between radio and TV mode

Channel selection

ⓘ Channel information from the current channel

OK Confirm sub-menus and menu options, open channel list

EPG Open electronic programme guide

►► Currently not used

■ Currently not used

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FIRST INSTALLATION

> **Before using your receiver for the first time, read the "Safety Instructions" and "Connection and Set-up" sections.**
>
> **The "Connection Examples" section provides a sample configuration.**
>
> **Do not connect the receiver to the power supply until all installation work has been properly carried out.**
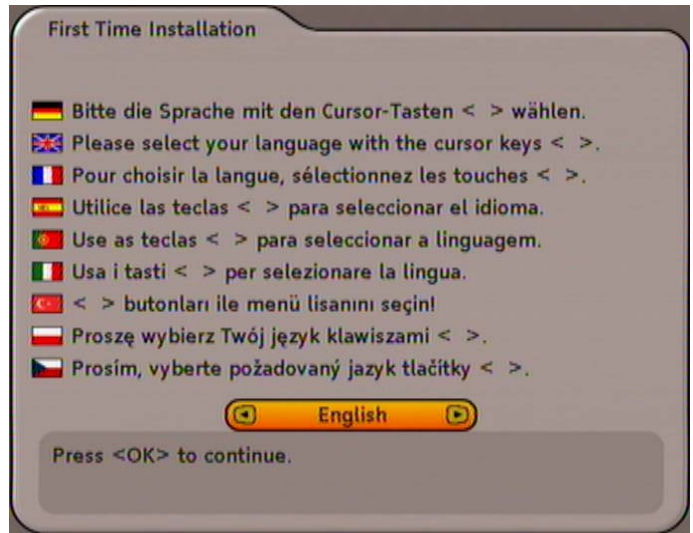>
> **The guidance given in the "First Installation" section assumes that the receiver has been properly connected as per the "Safety Instructions" and "Connection and Set-Up" sections.**

First switch your TV set on and select the AV channel slot. Connect your receiver to the mains and switch it on using the power switch on the front of the receiver. The following display appears:
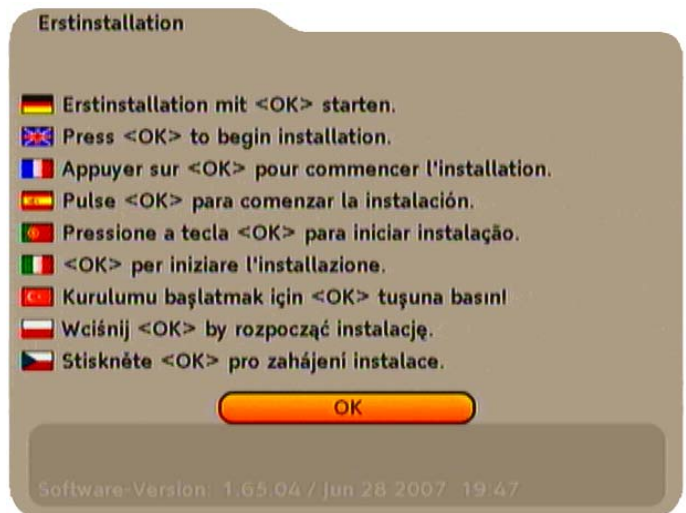
Press the [OK] button to start the first installation. The following display appears:

FIRST INSTALLATION

First Time Installation

■ Bitte die Sprache mit den Cursor-Tasten < > wählen.
■ Please select your language with the cursor keys < >.
■ Pour choisir la langue, sélectionnez les touches < >.
■ Utilice las teclas < > para seleccionar el idioma.
■ Use as teclas < > para seleccionar a linguagem.
■ Usa i tasti < > per selezionare la lingua.
■ < > butonları ile menü lisanını seçin!
■ Proszę wybierz Twój język klawiszami < >.
■ Prosím, vyberte požadovaný jazyk tlačítky < >.

◄ English ►

Press <OK> to continue.

Use the ◄► buttons to select the desired menu language. Pressing the OK button loads the desired menu language and calls up the next menu:

First Time Installation

⟳ Settings

Country	◄	United Kingdom ►
Screen Format		4:3
TV Output Format		RGB
Network search		Off
Sorting		A to Z
		OK

Select the country where you are.

Press the ◄► buttons to select the desired country. Press the ▲▼ buttons to access the "Screen

Format" line. Use the ◄► buttons to set the screen format for your TV set. Refer to the user guide / operating instructions for your TV set.

Press the ▲▼ buttons in the "TV Output Format" line. Use the ◄► buttons to select the signal that your TV set can process.

Press the ▲▼ buttons to access the "Network search" line.

Use the ◀▶ buttons to select whether the network search should be "On" or "Off". If the network search is set to "On" you will be shown the "Manual Search" in the next display. You should use this if your cable network operator has advised you of the frequency that can be searched.

If you do not know the frequency or frequencies to be searched, set the network search to "Off". You will then be shown the "Automatic Search". Press the ▲▼ buttons to access the line "Sorting". Use the ◀▶ buttons to specify how the channels should be sorted in the channel list. You have the following options: "A to Z", "Z to A", by "Provider", "Service ID" or "None".

Press the ▲▼ buttons to access the next line. Press the OK button to go to the next menu:

Note: *The frequencies, symbol rates and modulation settings used, and the channels available, may be different for different cable network operators. So as to keep the search time as short as possible, you can ask your cable network provider in advance for information on which channels are transmitted on which frequencies with which symbol rates and with which sort of modulation, and then set up the search accordingly.*

Network search "Off"

Network search "On"
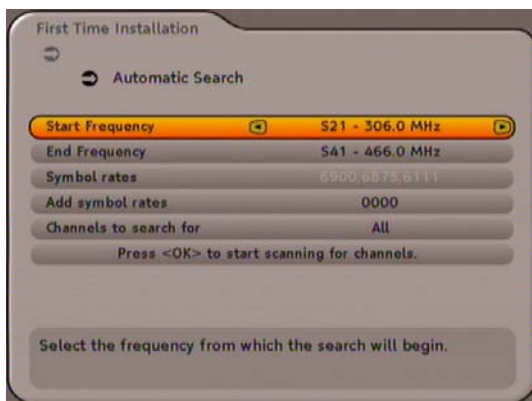
If you do not know the frequencies used by your cable network operator, use the ◀ button to select the lowest frequency permitted by the receiver for starting the search (keep the ◀ button pressed until the ◀ button is no longer shown in the start frequency line).

Press the ▲▼ buttons to access the next line.

Press the ▶ button to select the highest permitted by the receiver for ending the search (keep the ▶ button pressed until the ▶ button is no longer shown in the end frequency line).
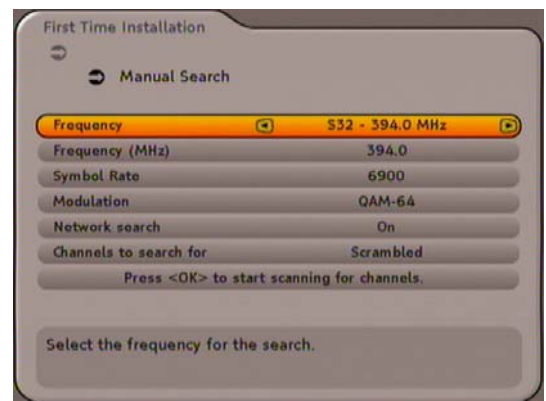
If you know your cable network provider's frequency, use the ◀▶ buttons to set the desired start frequency for the search.

Press the ▲▼ buttons to access the next line. If necessary you can input the frequency again at this point, using the numeric pad buttons.

Press the ▲▼ buttons to access the next line. If necessary you can input the symbol rate again at this point, using the numeric pad buttons on the remote control.

Press the ▲▼ buttons to access the next line. If necessary you can set the type of modulation at this point, using the ◀▶ buttons.

Press the ▲▼ buttons to access the next line. If necessary you can add another symbol rate for the search for channels in addition to the usual one (shown in grey). You can use the numeric pad on the remote control to do this.

Press the ▲▼ buttons to access the next line.

If necessary you can use the ◄► buttons to change the network search settings again.

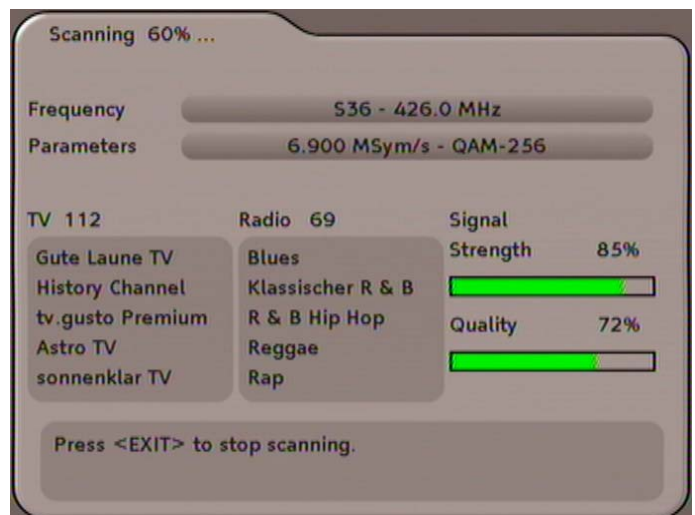Press the ▲▼ buttons to access the next line.

Use the ◄► buttons to perform the settings for the channels to search for. You can select from "All", "Only encrypted" and "Only free to air".

Press the ▲▼ buttons to access the next line.

Pressing the OK button starts the search for channels.

Press the ▲▼ buttons to access the next line.

If necessary you can use the ◄► buttons to change the network search settings again.

Press the ▲▼ buttons to access the next line.

Use the ◄► buttons to perform the settings for the channels to search for. You can select from "All", "Only encrypted" and "Only free to air".

Press the ▲▼ buttons to access the next line.

Pressing the OK button starts the search for channels.

The following display appears (example):

Scanning 60% ...			
Frequency		S36 - 426.0 MHz	
Parameters		6.900 MSym/s - QAM-256	
TV 112	Radio 69	Signal	
Gute Laune TV	Blues	Strength	85%
History Channel	Klassischer R & B		
tv.gusto Premium	R & B Hip Hop	Quality	72%
Astro TV	Reggae		
sonnenklar TV	Rap		
Press <EXIT> to stop scanning.			

FIRST INSTALLATION

After completion of the search, you will see the following message (example):
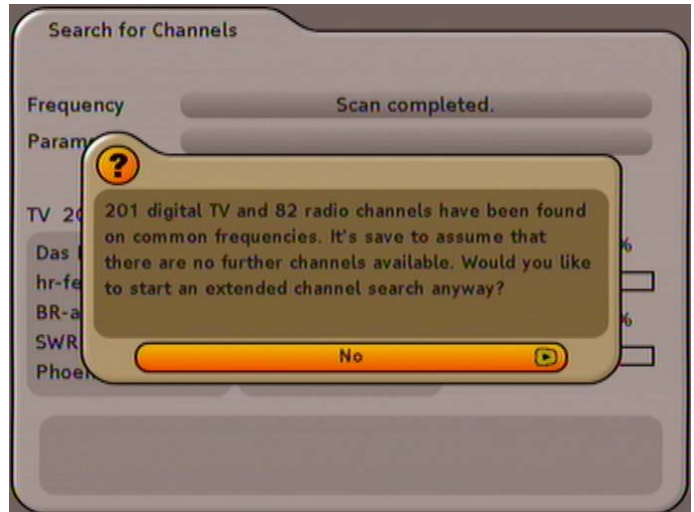
If it happens that not all the channels available on the cable network are found, you can set the ◄► *buttons to "Yes" and start searching again by pressing the* OK *button. Normally however this will not find any further channels.*

At the same time press the OK *button.*

The following display appears:

Pressing the OK button confirms and loads the channels that were found into the channel list. The following display appears:

FIRST INSTALLATION

Press the [OK] button to confirm. The first installation is now complete and your settings will be saved. The receiver will automatically return to the TV picture.

OPERATION

USING THE REMOTE CONTROL

Press the [OK] button to confirm settings in the menus or to open sub-menus. Change the settings line by line and press the [OK] button to save your changes. Press the [EXIT] button to quit the menu or to switch from a sub-menu to the next higher menu level.

Use the [▲][▼] buttons to navigate through the menus. Use the [◄][►] buttons to edit the individual fields. You can also key in values in the fields using the numeric pad.

The coloured buttons are used for the functions within the various sub-menus. These functions are displayed on-screen for the respective menus. In each menu a line is displayed at the bottom of the screen explaining the various functions available.

CHANNEL SELECTION (TV AND RADIO)

You can select the channels directly in the order in which they are saved using the buttons. You can only select between the channels in the currently selected channel list or favourite channel list.

Press the button (blue) to switch between TV and radio channels.

When you first select an encrypted channel the receiver will display a screen requesting that you set up a Maturity Rating. Setting up the Maturity Rating is described in the "Conditional Access (Common Interface)" and "Setting up the Maturity Rating" chapters. If you do not set up a Maturity Rating, you will see this notice again when next you select an encrypted channel.

SELECTING A CHANNEL FROM THE CHANNELS LIST / FAVOURITES LIST

Open the currently selected channel list by pressing the [OK] button. The following display appears (example):

Press the button (blue) to switch between the TV and radio channel lists.

Press the button (red) to switch between the existing favourites lists and the channels list. Empty favourites lists are not displayed.

Use the [▲][▼][◄][►] buttons to select the desired channel and then press the

[OK] button twice.

OPERATION

BANNER

When switching to a different channel or at the start of a new program the following information is displayed on the screen:

Channel selected from ... (e.g. 1 = first favourite list)

Channel position

Channel name

Available sound options. Press the OPT button (yellow) to call up the sound options.

0008 Das Erste

09:55 ARD-Wetterschau

09:57 10:00 Tagesschau

Current time

Current and next programmes with start and end times

To call up available programme information press the (i) button

| Now | 08:15-10:15 (2:00) |

Show/Game show

NDR Talk Show

Deutschland, 2007

0006 3sat

08:15 NDR Talk Show

09:25 10:15 Paradies der Störche - Naturreservat an d...

Press the ▶ button to obtain additional information about the next programme. Press the ◀ button to obtain additional information about the current programme. Press the EXIT button to exit the additional information.

OPERATION

VIDEOTEXT (TELETEXT)

Press the 🔤 button to open Teletext. When Teletext is called up for the first time you will be asked whether you wish in future to call up Teletext using the receiver remote control or as previously using the TV set

remote control (see screen shot below). Use the ◀▶ buttons to select the desired variant and press the

OK button to confirm.
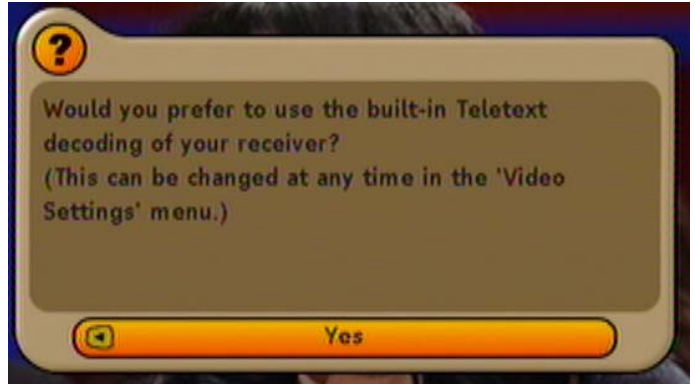
When using Teletext via the receiver remote control:

You can open the required Teletext page using the number pad.
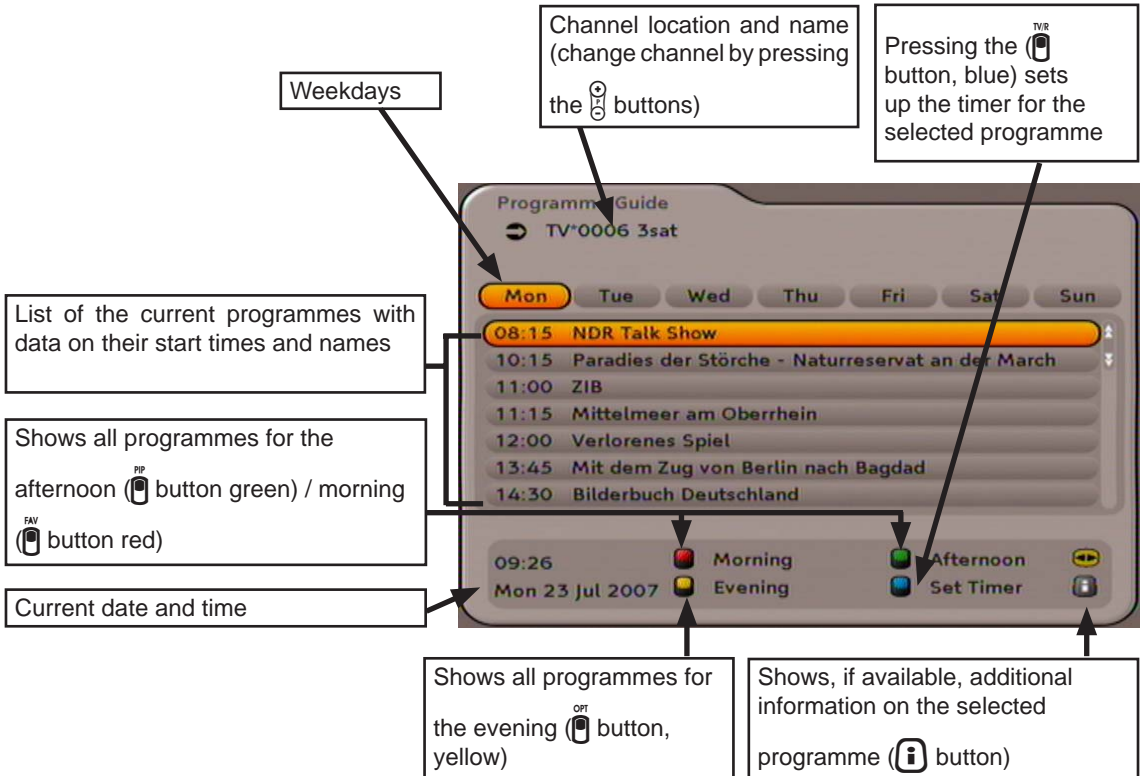
You can scroll back and forward using the ▲▼ buttons. Pressing the 🔤 button again renders the Teletext display transparent.

To exit Teletext press the EXIT button.

OPERATION

ELECTRONIC PROGRAMME GUIDE (EPG)

Press the [EPG] button to open the electronic programme guide. The following display appears (example):

Channel location and name (change channel by pressing the buttons)

Pressing the (TV/R button, blue) sets up the timer for the selected programme

Weekdays

List of the current programmes with data on their start times and names

Shows all programmes for the afternoon (PIP button green) / morning (FAV button red)

Current date and time

```
Programme Guide
⮑ TV*0006 3sat

Mon    Tue    Wed    Thu    Fri    Sat    Sun

08:15   NDR Talk Show
10:15   Paradies der Störche - Naturreservat an der March
11:00   ZIB
11:15   Mittelmeer am Oberrhein
12:00   Verlorenes Spiel
13:45   Mit dem Zug von Berlin nach Bagdad
14:30   Bilderbuch Deutschland

09:26            🔴 Morning        🟢 Afternoon    ⬅➡
Mon 23 Jul 2007  🟡 Evening        🔵 Set Timer    ℹ
```

Shows all programmes for the evening (OPT button, yellow)

Shows, if available, additional information on the selected programme (ℹ button)

Use the buttons to select the desired channel and use the ▲▼ buttons to select the desired programme.

Use the ◀▶ buttons to switch between the displayed days of the week. The selected day of the week and the selected programme are each indicated by an orange bar. The EPG shows you, provided the information is available, the current programmes on each channel.

SORT ORDER

Press the FAV button (red) to obtain the programmes for the morning, press the PIP button (green) to obtain the programmes for the afternoon, and press the OPT button (yellow) to obtain all the programmes for the evening.

INFO (ADDITIONAL PROGRAMME INFORMATION)

Press the ℹ button to obtain additional information on the selected programme (if available). The following display appears (example):
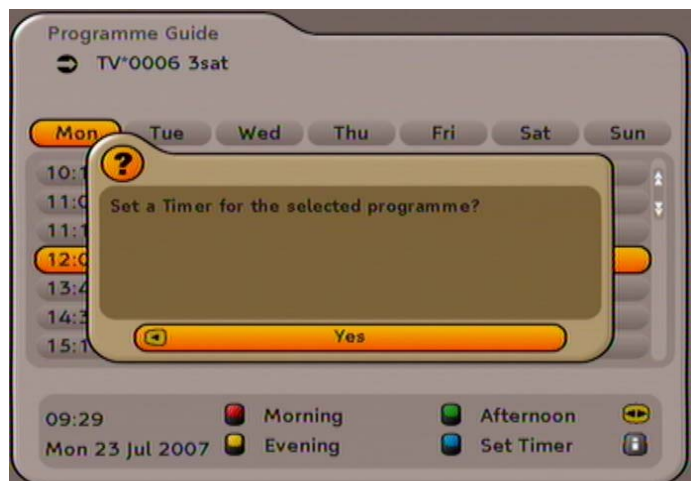
OPERATION
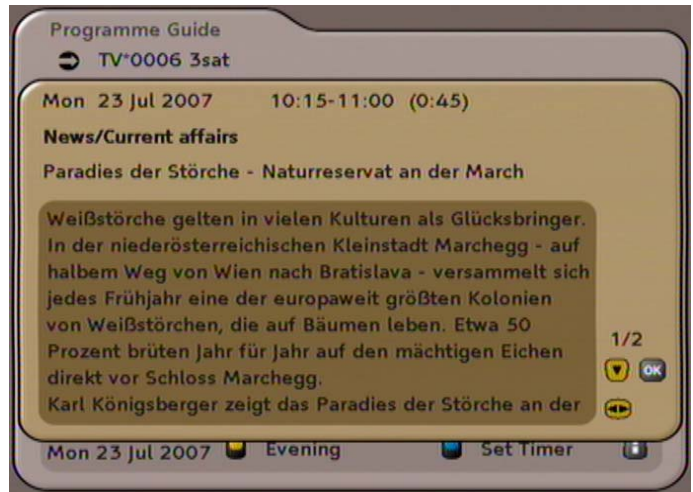
Press the ⬆⬇ buttons to page through the additional information (if there is more than one page). Use the

◀▶ buttons to obtain additional information on the next programmes and press the EXIT button to exit the additional information again.

TIMER PROGRAMMING FROM EPG

The receiver offers you the facility to use the 📱 (blue) button to load a programme directly from the EPG into

the timer. Use the ⬆⬇◀▶ buttons to select the desired programme. An orange bar is placed behind

the selected programme. Now press the 📱 (blue) button to load the selected programme into the timer. The following display appears (example):

The receiver asks once again whether a timer should be programmed for the selected programme. Use the

◀▶ buttons (Yes/No) and start the selection by pressing the OK button.

OPERATION

The receiver copies the data available from the EPG directly to the information for programming the timer.

You must program your external recorder identically to the receiver!

> Further information an creating and editing (changing/deleting) timers can be found in the "Timer" chapter.

AUDIO

Press the (yellow) button to display the audio and subtitle information (TV or radio) transmitted with the programme being received. Select the desired option using the buttons and load it by pressing the button. Press the button to return to the TV picture. Press the (green) button to allow selection of mono left, mono right, mono and stereo directly on the TV screen.

COMMON INTERFACE

IMPORTANT INFORMATION

> **Always follow the operating instructions from your Pay-TV provider and the instructions supplied with the Smartcard and the CA module!**
>
> **Smartcards and CA modules are not included with this product!**
>
> **The cards and modules are issued by the respective Pay-TV providers, and contain the subscriber data and details of the channels for which the subscriber has paid. These channels are always encrypted.**
> **Contact the Pay-TV provider if you are interested in subscribing to a particular Pay-TV channel.**
>
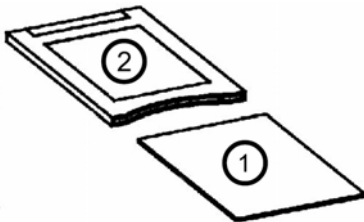> **You are responsible for the use of the Smartcard in the CA!**
>
> **The Smartcard sold by the Pay-TV provider, specific to a particular encryption technology, is inserted into the CA module.**
>
> **Store your card and PIN code securely when not in use!**

INSERTING THE SMARTCARD AND THE CA MODULE

INSERTING THE CA MODULE INTO THE CI
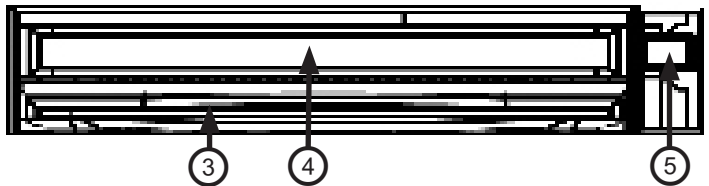
The Common Interface (CI) ④ of the UFC 762si/sw can accept one CA (Conditional Access) module. The CI slot is under the display at the right of the front panel.

The CA module ② draws in the Smartcard ① (chip contacts pointing upwards and towards socket strip)

which it then inserts into the CI slot ④.
Insert the Smartcard into the CA module without excessive force. This also applies to inserting the CA module into the CI slot.Do not use excessive force, and follow the instructions supplied with the Smartcard and the CA module.

To remove the module, press the relevant eject button ⑤.

INSERTING THE SMARTCARD INTO THE SMARTCARD READER

The Smartcard is inserted into the Smartcard reader (Cryptoworks embedded) ③ in exactly the same way as into the CA module, except that in this case the chip contacts point downwards.

MAIN MENU

Press the [MENU] button to open the main menu. The following display appears:

Seven sub-menus are available, as detailed below:

1)   Box Settings
Various facilities are available for setting the picture, the language, the menu and for resetting to the factory settings

2)   Search for Channels
Automatic, Extended and Manual Searches

3)   Sort Channels
Organisation of the favourites lists (adding channels to and removing channels from the favourites lists, sorting the favourites lists)

4)   Technical Information
Programme and system information

5)   Timer
Setting and changing the timer

6)   Security
Locking the receiver, locking menus, maturity rating, changing the receiver PIN

7**)   Conditional Access**
Smartcard reader and Common Interface

Use the [▲][▼] buttons to select the desired sub-menu and press the [OK] button to open the menu.

To quit the menu and save the changes, press the [EXIT] button.
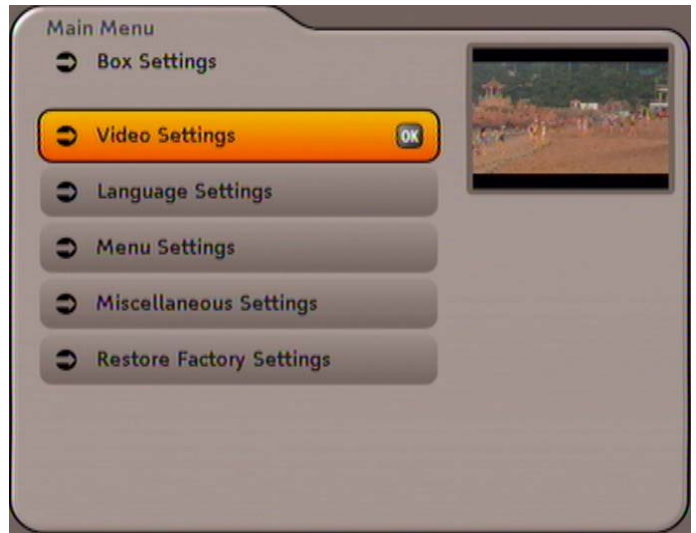
BOX SETTINGS

Five submenus are available, as detailed below:

1) Video Settings
   Specifying the video settings

2) Language Settings
   Setting the menu, subtitle and audio language

3) Menu Settings
   Specifying various menu settings

4) Miscellaneous Settings
   Time Zone Adjustment, the audio output format, the automatic output of Dolby Digital, the audio delay (if used) and the sorting of the channel list

5) Restore Factory Settings
   Restore Factory Settings

Use the ▲▼ buttons to select the desired sub-menu and press the OK button to open the menu.

To quit the menu and save the changes, press the EXIT button.

BOX SETTINGS

VIDEO AND AUDIO SETTINGS

Also pay attention to the bars at the bottom of the on-screen display! These provide information on what to do next.

Use the ⏶⏷ buttons to select the line you want to change. Use the ◀▶ buttons to make the changes.

```
Main Menu
  ⟲  Box Settings
      ⟲  Video Settings

  Screen Format              ◀   16:9 / Widescreen TV
  Picture Scaling                     Automatic
  TV Output Format                       RGB
  VCR Output Format                  Video (CVBS)
  AFD Automatic                           On
  Teletext                         External (TV)
  Restore Default Settings               OK

  Select video output to match the screen format of your TV.
```

Screen Format:
Select your TV's format here. Either 4:3 (letterbox 14:9), 4:3 (letterbox 16:9), 4:3 (Pan & Scan/CCO) or 16:9/wide-screen TV

Picture Scaling:
Here select how the receiver should display a picture which does not match its pre-set format.
For screen format 4:3: Either "Letterbox 14:9", "Letterbox 16:9", or "Pan & Scan/CCO"For screen format 16:9 / wide-screen TV: Either "Stretched", "Zoom" or "Pillarbox"

TV Output Format:
Select the type of video signal that should be present at the TV Scart socket. Select the signal that your TV set can process.

Refer to the operating instructions for your television set!

You can choose from the following settings: RGB (Red/Green/Blue signal), S-video (luminance/chrominance) and CVBS (Colour Video Baseband Signal)

VCR Output Format:
Select the type of video signal that should be present at the VCR Scart socket. Select the signal that your external recorder can process. Available options: S-video and CVBS

Refer to the operating instructions for your recorder!

AFD Automatic:
This function corrects the screen format automatically if the broadcast screen format varies from that displayed

Teletext:
You can select whether the Teletext is controlled by the TV remote control (external, Teletext signal is processed by the TV set) or by the receiver remote control (internal, Teletext signal is processed by the receiver).
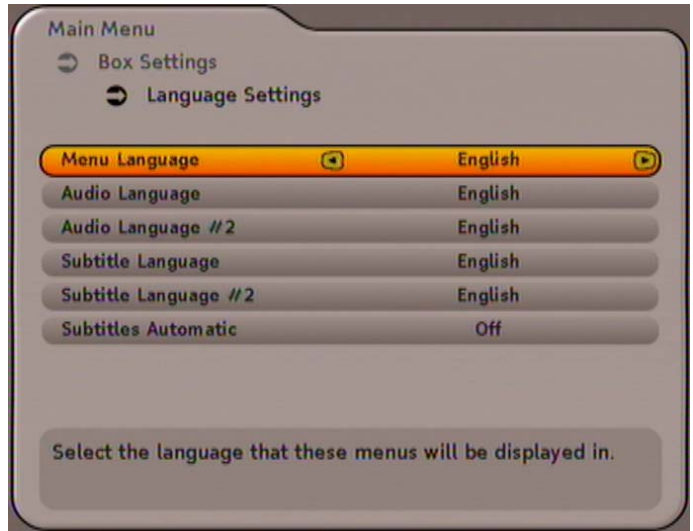
BOX SETTINGS

Restore Default Settings:
Here you can restore the default settings for picture and sound

To quit the menu and save the changes, press the [EXIT] button.

LANGUAGE SETTINGS

Also pay attention to the bars at the bottom of the on-screen display! These provide information on what to do next.

Use the [▲][▼] buttons to select the line you want to change. Use the [◄][►] buttons to make the changes.

Menu Language:
Select the required menu language. Available options: German, English, French, Spanish, Portuguese, Italian, Turkish, Polish, Czech and Russian.

(First) audio language and second audio language:
Select here the required audio languages. Available options: German, English, French, Spanish, Portuguese, Italian, Turkish, Polish, Czech, Russian, Swedish, Finnish, Danish, Norwegian, Dutch, Slovakian, Catalan, Basque, Greek, Icelandic, Welsh and Gaelic.

(First) subtitle language and second subtitle language:
Select here the required subtitle language. Available options: German, English, French, Spanish, Portuguese, Italian, Turkish, Polish, Czech, Russian, Swedish, Finnish, Danish, Norwegian, Dutch, Slovakian, Catalan, Basque, Greek, Icelandic, Welsh and Gaelic.
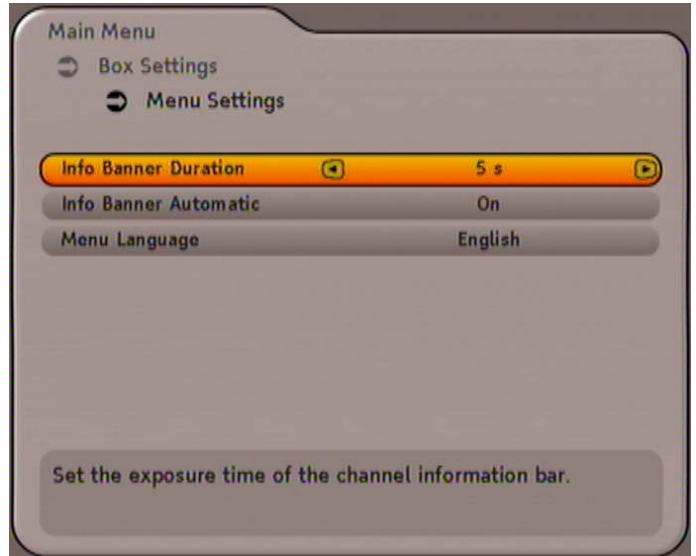
Subtitles Automatic:
Here you can set whether subtitles are displayed automatically or not.

To quit the menu and save the changes, press the [EXIT] button.

BOX SETTINGS

MENU SETTINGS

Also pay attention to the bars at the bottom of the on-screen display! These provide information on what to do next.

Use the ▲▼ buttons to select the line you want to change. Use the ◄► buttons to make the changes.

Info Banner Duration:
Here you can set the following banner display times: "Permanent", "None" and then in 1-second steps up to 15 seconds.

Info Banner Automatic:
Here you can set whether the info banner is automatically displayed at the start of a broadcast or not.

Menu Language:
Here you can set the following menu languages: German, English, French, Spanish, Portuguese, Italian, Turkish, Polish and Czech.

To quit the menu and save the changes, press the EXIT button.

BOX SETTINGS

MISCELLANEOUS SETTINGS

Also pay attention to the bars at the bottom of the on-screen display! These provide information on what to do next.
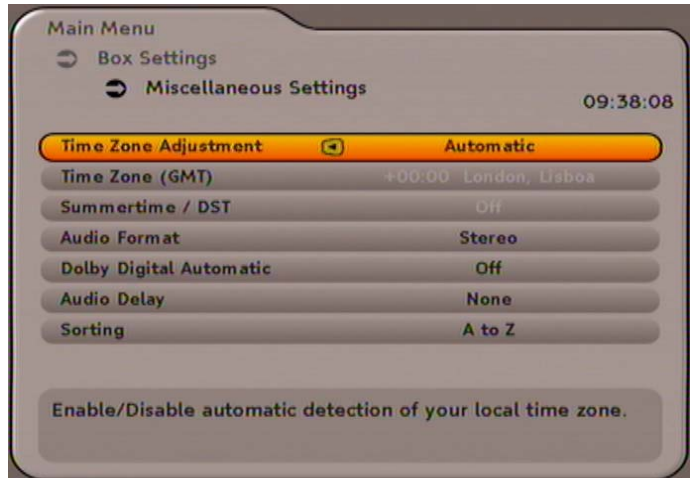
Use the ▲▼ buttons to select the line you want to change. Use the ◄► buttons to make the changes.

Time Zone Adjustment:
Here you can set whether the time zone is set automatically or manually.

Time Zone (GMT):
Here you can manually set the time zone (available only if "Time Zone Adjustment" is set to "manual").

Summer Time / DST:
This menu item switches summer time on and off (available only if "Time Zone Adjustment" is set to "manual").

Audio Format:
Select the standard audio output format here. You have the choice between "Mono (from the right channel)", "Mono (from the left channel)", "Mono (total)" and "Stereo". These audio operating modes "Mono from the left channel" etc. are important if you wish to hear two different languages for the TV programme simultaneously (DUAL operating mode).

Dolby Digital Automatic:
Here you can select whether the receiver should automatically deliver Dolby Digital sound (when broadcast) to the Dolby Digital output.

Audio Delay:
Here you can select whether the sound should be output with a delay of (100/200/300/400 or 500 milliseconds). You can use this in the event that the sound and picture are not output synchronously at the TV set. If no delay is required, set the delay to "None".

Sorting:
Here you can specify the sorting of the channel lists. You can select from "Channel providers" (such as ARD),

"A to Z" (alphabetic) or "None". To quit the menu and save the changes, press the EXIT button.

BOX SETTINGS

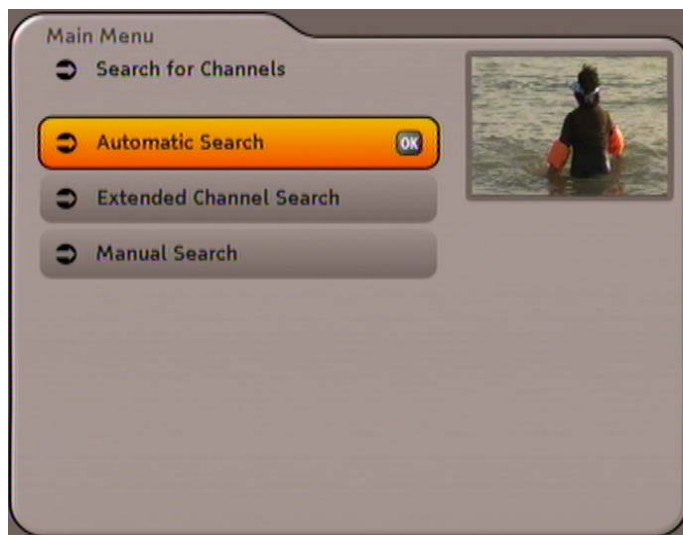## RESTORE FACTORY SETTINGS

Here you can restore all the settings to the pre-programmed factory settings.

> **All your personal preferences (favourites lists, channel sorting, etc.) will be deleted!**

Use the ◀▶ buttons to change to "Yes" and confirm the restore by pressing the OK button.

SEARCH FOR CHANNELS

Select the search you want using the ▲▼ buttons and call up the desired sub-menu by pressing the OK button. You can choose between:

Automatic Search:
Here you can initiate a search over the preset broadcasting frequencies for the receiver or over the range of frequencies that you select.

Extended Channel Search:
Here you can initiate a search over all the broadcasting frequencies that can be received by your receiver.

Manual Search:
Here you have several setting options for initiating a selective search.

SEARCH FOR CHANNELS

AUTOMATIC SEARCH

⚠️ The frequencies and symbol rates, and the channels available, may be different for different cable network operators. So as to keep the search time as short as possible, you can ask your cable network provider in advance for information on which programmes are transmitted on which frequencies and channels and with which symbol rates, and then set up the search accordingly.

Main Menu
⮌ Search for Channels
　⮌ Automatic Search

Start Frequency	S21 - 306.0 MHz
End Frequency	S41 - 466.0 MHz
Symbol rates	6900,6875,6111
Add symbol rates	0000
Channels to search for	All

Press <OK> to start scanning for channels.

Press <OK> to start scanning for channels.

Use the ◀▶ buttons to select the start frequency for the search.

Press the ▲▼ buttons to access the next line.

Use the ◀▶ buttons to select the end frequency for the search.

Press the ▲▼ buttons to access the next line. If necessary you can input further symbol rates at this point, using the numeric pad buttons on the remote control.

Press the ▲▼ buttons to access the next line. Use the ◀▶ buttons to perform the settings for the channels to search for. You can select from "All", "Only encrypted" and "Only free to air".

Press the ▲▼ buttons to access the next line. Press the OK button to start scanning for channels.

Scanning 60% ...

Frequency	S36 - 426.0 MHz
Parameters	6.900 MSym/s - QAM-256

TV 112

Gute Laune TV
History Channel
tv.gusto Premium
Astro TV
sonnenklar TV

Radio 69

Blues
Klassischer R & B
R & B Hip Hop
Reggae
Rap

Signal
Strength   85%

Quality   72%

Press <EXIT> to stop scanning.

SEARCH FOR CHANNELS

After completion of the search, you will see the following message (example):

If it happens that not all the channels available on the cable network are found, you can set the ◀▶

*buttons to "Yes" and start searching again by pressing the* OK *button. Normally however this will not find any further channels.*

At the same time press the OK *button.*

Use the ◀▶ buttons to select whether you wish to add new channels to the old ones, to replace the old

channel list or to discard the new channels. Press the OK button to confirm your selection. Press the EXIT button to exit the menu and return to the TV picture.

SEARCH FOR CHANNELS

EXTENDED CHANNEL SEARCH
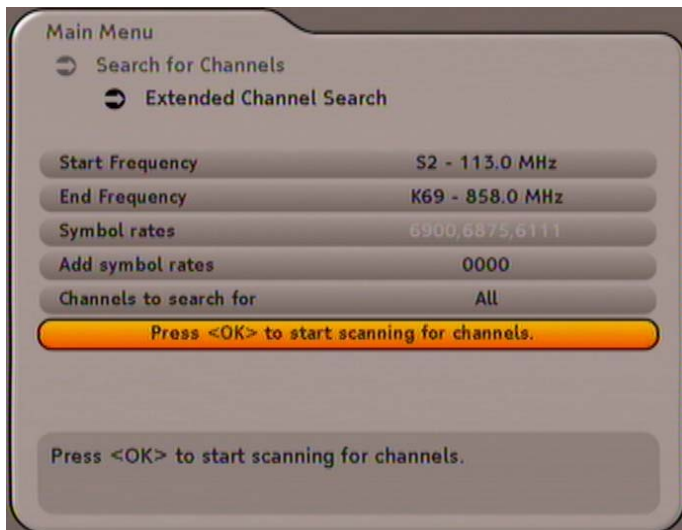
The pre-setting in this search is automatically set to the lowest start frequency and the highest end frequency available in the receiver. This ensures that all frequencies that the receiver is capable of receiving are searched for available channels.

You can however use the ◄► buttons at any time to set the properties of the search. Use the ▲▼ buttons to select the lines to be edited.

If you require additional symbol rates you can use the numeric pad to add these in the line "Add symbol rates".

You can furthermore use the "Channels to search for" line to select whether "All" channels (free to air and encrypted) should be searched, or "Only encrypted" or "Only free to air" channels.

Press the ▲▼ buttons to access the last line. Pressing the OK button starts the "Search for Channels".

The rest of the procedure (and displays) is identical to the automatic search.

SEARCH FOR CHANNELS

MANUAL SEARCH

So as to perform a targeted search for specific channels, the data must appear in the four lines frequency to modulation.

Main Menu
⟳ Search for Channels
  ⟳ Manual Search

Frequency	◄	S32 - 394.0 MHz	►
Frequency (MHz)		394.0	
Symbol Rate		6900	
Modulation		QAM-64	
Network search		Off	
Channels to search for		Scrambled	

Press <OK> to start scanning for channels.

Select the frequency for the search.
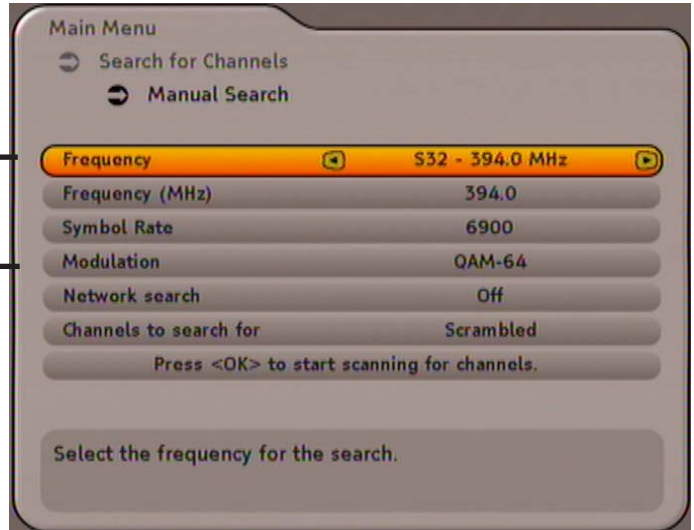
Use the ◄► buttons to select the transmission channel (with transmission frequencies) that is to be searched. Press the ▲▼ buttons to access the next line. If the displayed transmission frequency does not match your data, you can use the numeric pad to enter it here manually. Press the ▲▼ buttons to access the next line. If the displayed symbol rate does not match your data, you can also use the numeric pad to enter it here manually. Press the ▲▼ buttons to access the next line. If the displayed modulation does not match your data, you can use the ◄► buttons to enter it here manually.

Press the ▲▼ buttons to access the next line. If the displayed modulation does not match your data, you can use the ◄► buttons to enter it here manually.

Press the ▲▼ buttons to access the "Network search" line. Use the ◄► buttons to select whether the network search should be "On" or "Off". If the network search is "On", the networking between individual cable transponders is used to find new cable transponders that have not yet been saved. These too are then searched for new channels.

Press the ▲▼ buttons to access the next line. Use the ◄► buttons to perform the settings for the channels to search for. You can select from "All", "Only encrypted" and "Only free to air".

Press the ▲▼ buttons to access the next line. Pressing the OK button starts the "Search for Channels".

The rest of the procedure (and displays) is identical to the automatic search.

SORT CHANNELS

Four favourites lists for TV and four for radio are available to you for sorting the channels within the channel lists. You can make up each favourites list with any channels you like. TV and radio channels cannot however be mixed within a single favourites list!

Pressing the 🔲 (blue) button toggles between the TV and radio favourites lists. Changes are executed in the same way in both sets of lists. Use the ▲▼ buttons and the OK button to call up the desired favourites list to which you wish to add channels or from which you wish to delete channels.

Before you start to assign channels to favourites lists you can filter the existing channels using certain criteria. Press the OK (yellow) button to go to the "Filter channels" menu:

The following display appears:

Filter channels

Channels	◀	All	▶
Filter by		No additional filter	
Network		n/a	
Sorting		Number	
		OK	

Include free, scrambled or all channels.
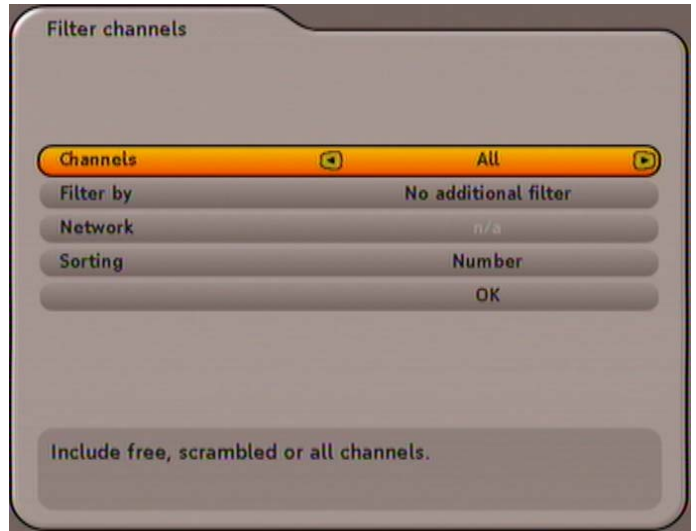
Use the ▲▼ buttons here to select the lines to be edited and use the ◀▶ buttons to perform the settings. You have the following selection options:

Channels: "All", "Only free to air" or "Only encrypted"
Filter by: "No other filters", "Network" (e.g. cable, Germany) or "Providers" (e.g. ARD)
Network (available only if "Network" selected under the item "Filter by"): e.g. Cable Germany
Sorting: "Number" (numbering from the channel list), "A-Z" or "Z-A"

After you have made all the settings, use the ▲▼ buttons to go to the "OK" line and press the OK button. Your sorting for assigning channels from the channel list to the favourites list will be loaded. The following display appears (example):

Sorting by network with selection of cable, Germany

Main Menu
⤶ Sort Channels
➲ Sort TV channels
Network: Kabel Deutschland, Scrambled
Channels 167 TV favourites 1 199

Channels			TV favourites 1	
0001 .	ⁿ⁰ ✳		0001 .	ⁿ⁰
0002 .	ⁿ⁰ ✳		0002 .	ⁿ⁰
0003 1-2-3.tv	ⁿ⁰ ✳		0003 1-2-3.tv	ⁿ⁰
0004 13 TH STREET	ⁿ⁰ ✳		0004 13 TH STREET	ⁿ⁰
0005 13th Street (...	ⁿ⁰ ✳		0005 13th Street (...	ⁿ⁰
0007 9Live	ⁿ⁰ ✳		0006 3sat	
0008 Al Jazeera Int ...	ⁿ⁰ ✳		0007 9Live	ⁿ⁰
0009 ANIMAL PLANET	ⁿ⁰ ✳		0008 Al Jazeera Int ...	ⁿ⁰

OK Add to favourites
🟡 Filter channels ◀▶ Change list 🔵

SORT CHANNELS

Use the ▲▼ buttons to identify the desired channel in the channel list that you wish to load into the favourites list. Press the OK button and the channel will be added to the favourites list. A channel that is included in any of the four favourites lists is marked in the channel list with a "*".

Use the ◀◀ ▶▶ buttons to switch between the channel list and the favourites list. You have the options of deleting individual channels from the favourites list, deleting all channels from the favourites list and moving individual channels around within the favourites list.

Deleting a channel:

Use the ▲▼ buttons to select the channel you wish to delete and press the (red) button. The channel immediately disappears from the favourites list; no confirmation message is issued.

Deleting All Channels:

Pressing the (yellow) button immediately deletes all channel from the favourites list; no confirmation message is issued.

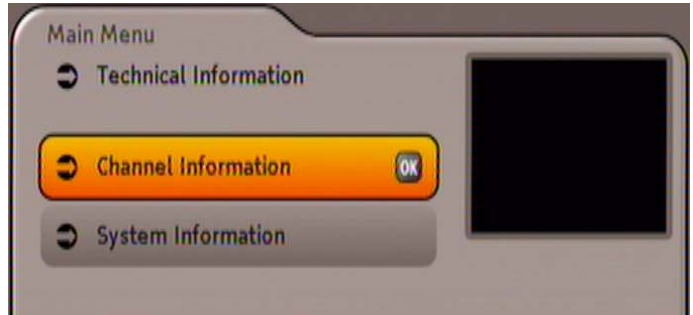Moving channels:

Use the ▲▼ buttons to select the channels that you wish to move. Pressing the OK highlights the channel name. Now use the ▲▼ buttons to select a new position for the channel and once again press the OK button.

When you have finished editing the favourites list, press the EXIT button. Use the ◀ ▶ buttons in the screen that is displayed to select whether you wish to save the changes (selection "Yes") or not save the changes (selection "No") or whether you wish to cancel the session (selection "Cancel"). Confirm your selection with the OK button. You can now repeat this procedure for other favourites lists or by repeatedly pressing the EXIT button return to the TV picture.

TECHNICAL INFORMATION

Use the ⏶⏷ buttons and the OK button to select the desired menu.

Channel Information:
Here you can view the following channel information: frequency, parameters, network, provider, service ID, Teletext PID, audio and video PID, signal strength and signal quality.
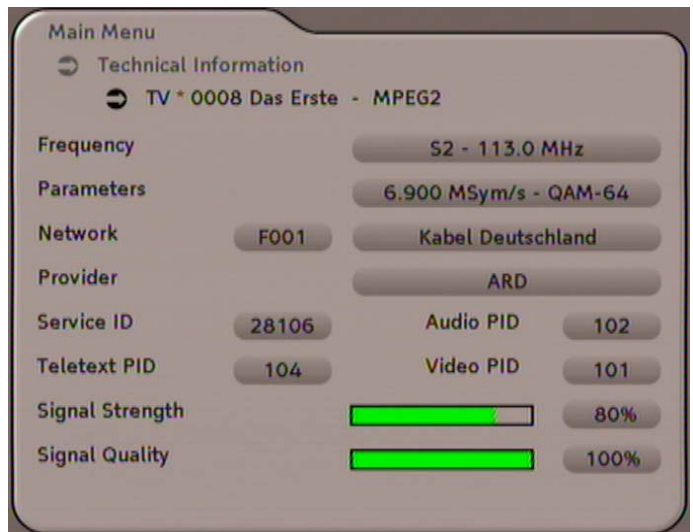
System Information:
Here the following information is provided: hardware version, system key, MAC address, product, software version, update software and operating hours.
In addition this submenu offers the facility to perform software updates.
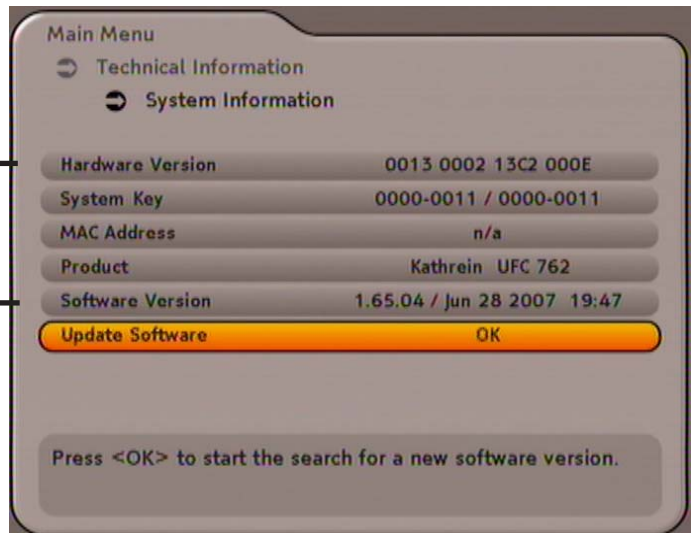
CHANNEL INFORMATION

You cannot change or delete any data here. This menu is merely for viewing the reception data for the currently selected channel.

TECHNICAL INFORMATION

SYSTEM INFORMATION AND SOFTWARE UPDATES VIA THE CABLE NETWORK

These items cannot be changed, they are merely to provide information about the current hardware and software versions.
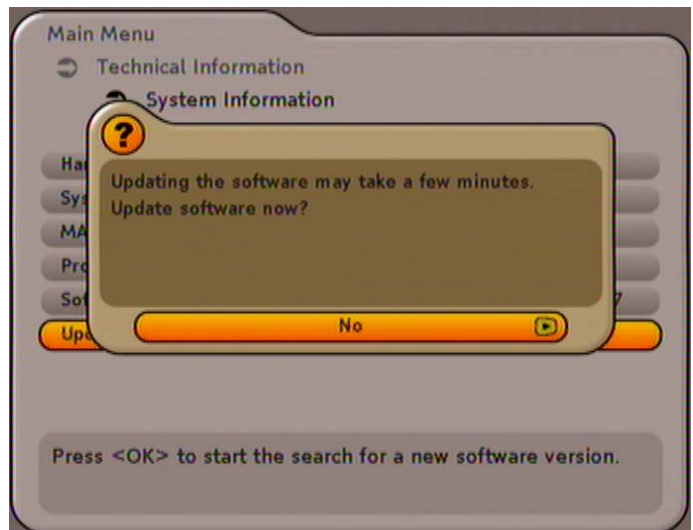
```
Main Menu
  ⊃ Technical Information
      ⊃ System Information

  Hardware Version              0013 0002 13C2 000E
  System Key                    0000-0011 / 0000-0011
  MAC Address                   n/a
  Product                       Kathrein  UFC 762
  Software Version              1.65.04 / Jun 28 2007  19:47
  Update Software                       OK

  Press <OK> to start the search for a new software version.
```

Press the OK button to confirm the start of a search for new available software or press the EXIT button to cancel the session. The following display appears:

Whether the new software is available in your cable network depends on the respective cable network provider!

If the new software is not available in your cable network you can however update the receiver using the PC. For this please refer to the "Software Update via the Internet" chapter.

```
Main Menu
  ⊃ Technical Information
      ⊃ System Information

  ?  Updating the software may take a few minutes.
     Update software now?

              No              ▷

  Press <OK> to start the search for a new software version.
```

In the following information window, use the ◀▶ buttons to select "Yes" and start the update by pressing

the OK button.
The receiver will now automatically search for new software. This process can take a few minutes. If no new updates are available, a message will be displayed accordingly and you can return to the TV picture by
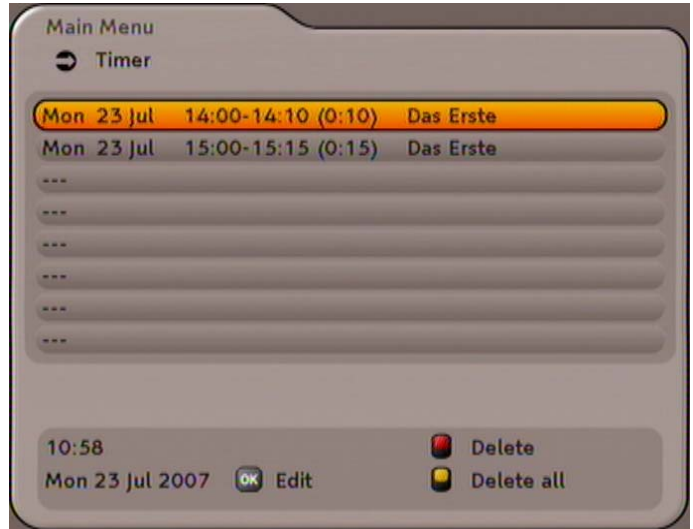
pressing the EXIT button.
If new updates are available, follow the instructions displayed in the menu.

TIMER

Press the ⟦MENU⟧ button to open the main menu. Use the ⟦▲⟧⟦▼⟧ buttons to select the "Timer" menu and press

the ⟦OK⟧ button (calls up the time menu directly by means of the ⦿ (red dot) button on the TV screen). The following display appears (example):

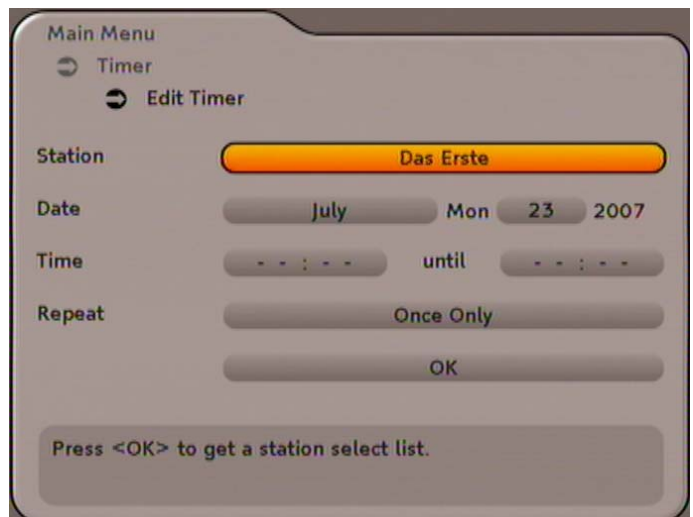Note: *You must program your external recorder identically to the receiver.*

If timer recording is started in stand-by mode, the receiver switches back to stand-by when recording is finished.

Main Menu		
⮌ Timer		
Mon 23 Jul	14:00-14:10 (0:10)	Das Erste
Mon 23 Jul	15:00-15:15 (0:15)	Das Erste

10:58		🔴 Delete
Mon 23 Jul 2007	⟦OK⟧ Edit	🟡 Delete all

MANUAL TIMER SETTING

Use the ⟦▲⟧⟦▼⟧ buttons to select the next free timer slot. If you wish to record a radio transmission, press the

⟦📺⟧ (blue) button to switch to the radio channel list. By pressing the ⟦OK⟧ button on an empty timer slot you can set up a timer manually.
The following display appears (example):

Main Menu	
⮌ Timer	
⮞ Edit Timer	
Station	Das Erste
Date	July Mon 23 2007
Time	- - : - - until - - : - -
Repeat	Once Only
	OK
Press <OK> to get a station select list.	

40

TIMER

Use the ▲▼ buttons to select the line you want to change. Make the changes using the ◄► buttons and the numeric pad.

Station:

Set here the channel on which the program to be recorded will be broadcast. Pressing the OK button brings

up a display of the channel list. Use the ▲▼ buttons and the OK button to select the desired channel.

Date:
Set the date for the recording here.

Time:
Here set the start and end times of the recording.

Repeat:
Set the cycle for the recording here. The selections available are "Once Only", "Daily", "Weekly" and "Monday

to Friday". Once you have made all the settings, use the ▲▼ buttons to select "OK" and confirm the timer

entries by pressing the OK button.

You can now program further timer events in the same way or press the EXIT button to quit the Timer menu.

AUTOMATIC TIMER SETTING

You can copy the data for the timer directly from the EPG (see "Operation" section, "Timer Programming From EPG").

DELETING A TIMER EVENT

To delete a timer event, use the ▲▼ buttons to select the timer line to be deleted and then press the FAV

(red) button. Use the ◄► buttons to select "Yes" to confirm the deletion and press the OK button.

EDITING A TIMER

To edit a timer event, use the ▲▼ buttons to select the timer line to be edited and then press the OK button.

Use the ▲▼ buttons to select the item to be changed. Make the changes using the ◄► buttons and the

numeric pad. Once you have made all the settings, use the ▲▼ buttons to select "OK" and confirm the

timer entries by pressing the OK button.

SECURITY

Press the 【MENU】 button to open the main menu. Select the "Security" menu using the 【▲】【▼】 buttons and press

the 【OK】 button. Enter the receiver PIN (factory setting "0000") and confirm it by pressing the 【OK】 button. The
following display appears (see example below):
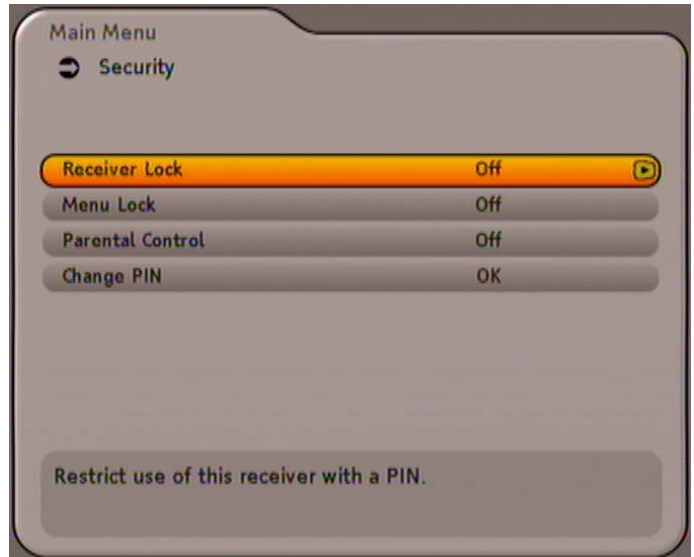
Use the 【▲】【▼】 buttons to select the lines to be changed and use the 【◄】【►】 buttons to perform the settings.

After you have made all the changes to the settings you can quit the menu again by pressing the 【EXIT】 button
(your setting will be loaded).

Receiver Lock:
If the receiver lock is set to "On", when the receiver is switched on it will request input of the PIN.

Menu Lock:
If the menu lock is set to "On", when the main menu is called up it will request input of the PIN.

Change PIN:

Press the 【OK】 button – you will be requested to input the old PIN. Confirm the input by pressing the 【OK】 button.

You must now input the new PIN and confirm it by pressing the 【OK】 button. For security you must input the

new PIN a second time. Press the 【OK】 button to acknowledge the displayed message. The receiver PIN has
now been changed.

CONDITIONAL ACCESS

Press the MENU button to open the main menu. Select the "Conditional Access" menu using the ▲▼ buttons and press the OK button. The following display appears:

Access to the Smartcard reader

Access to the Smartcard in the Smartcard reader

Access to the CA module with a Smartcard in the CI slot

Common Interface expert settings
Only users familiar with the CI should make changes using this menu.

Main Menu
➲ Conditional Access

➲ **Conax Conditional Access**   OK
➲ CryptoWorks CA
➲ CryptoWorks - Common
➲ Common Interface experts
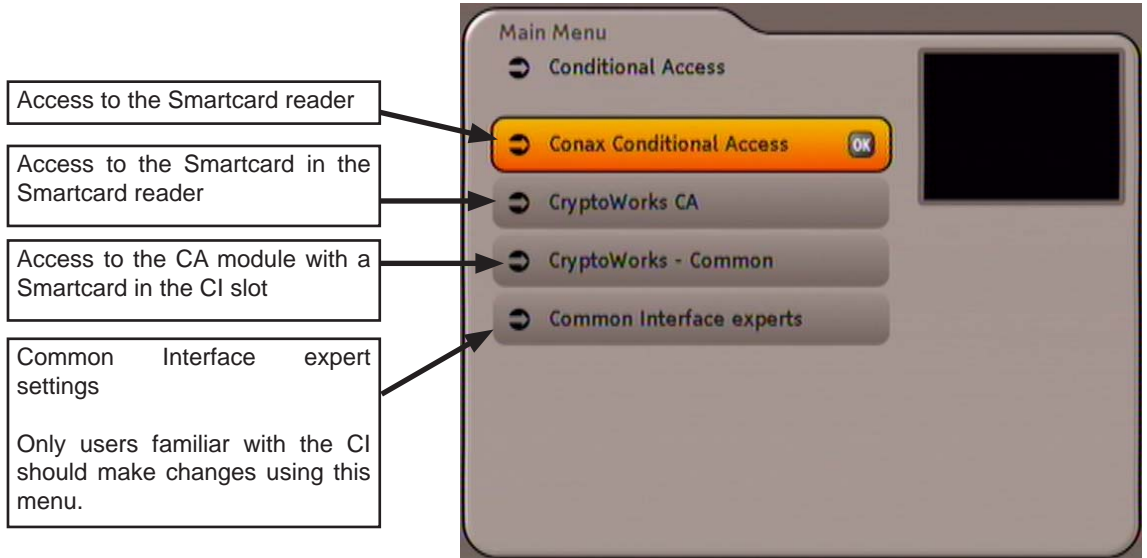
CONAX CA - SMARTCARD READER
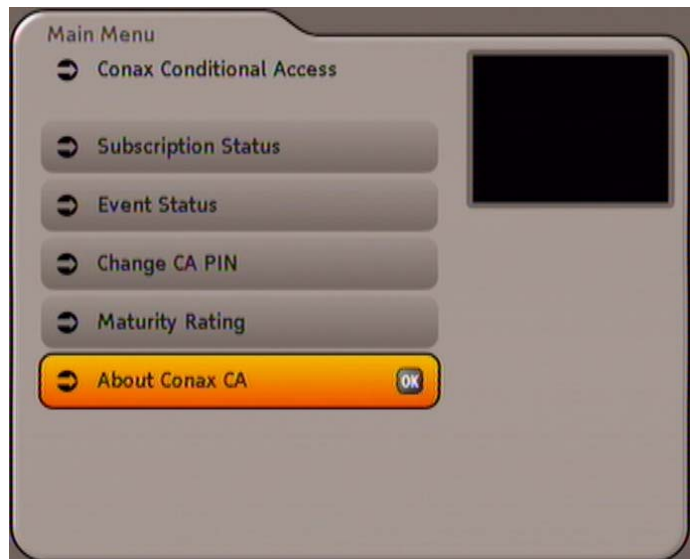
Press the OK button to call up the menu. The following display appears:

Main Menu
➲ Conax Conditional Access

➲ Subscription Status
➲ Event Status
➲ Change CA PIN
➲ Maturity Rating
➲ **About Conax CA**   OK

Use the ▲▼ buttons to select the desired menu, and press the OK button to open it. The menus depend on the Smartcard that is used. Please follow the instructions and information displayed by the receiver.

CONDITIONAL ACCESS

CRYPTOWORKS CA - SMARTCARD IN THE SMARTCARD READER

Press the [OK] button to call up the menu. The following display appears:
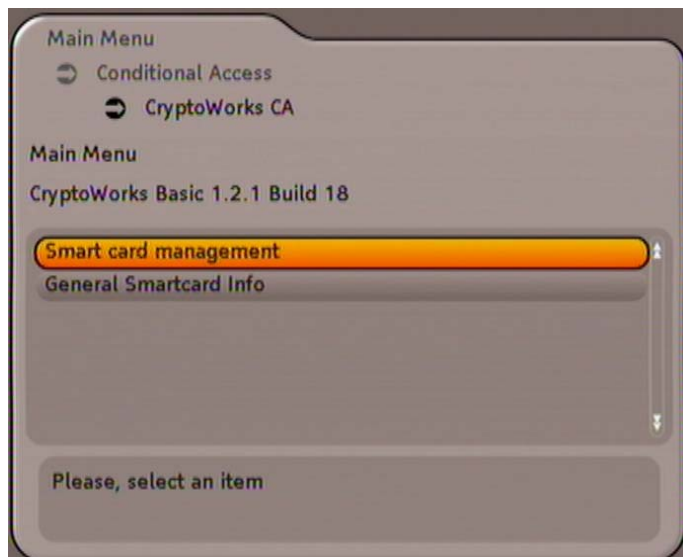
Use the [▲][▼] buttons to select the desired menu, and press the [OK] button to open it. The menus depend on the Smartcard that is used. Please follow the instructions and information displayed by the receiver.

CONDITIONAL ACCESS

CHANGE MATURITY RATING

Use the ▲▼ buttons to select the "Smartcard management" menu, and press the OK button to open it. If requested, enter the Smartcard PIN and confirm by pressing the OK button. Enter the new Smartcard PIN and confirm by pressing the OK button. For security you must enter the new Smartcard PIN a second time and confirm by pressing the OK button. Press the EXIT button to exit the menu.

When you first select an encrypted channel the receiver will display a screen requesting that you set up a Maturity Rating. If you do not set up any maturity rating, you will see this notice again when next you select an encrypted channel.
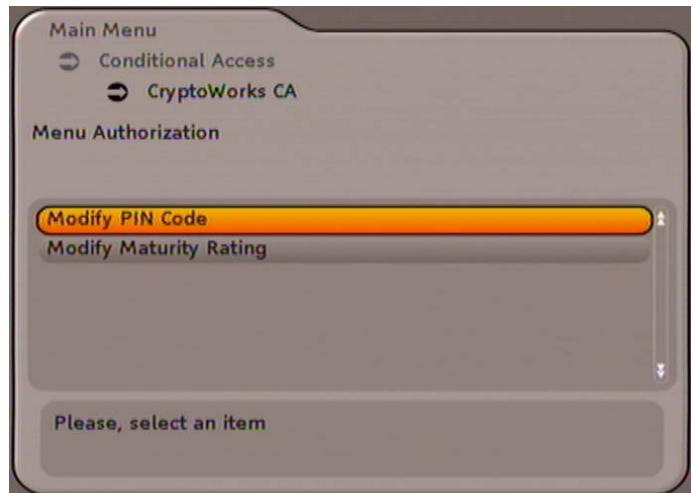
Use the ▲▼ buttons to select the "Change Maturity Rating" menu, and press the OK button to open it.
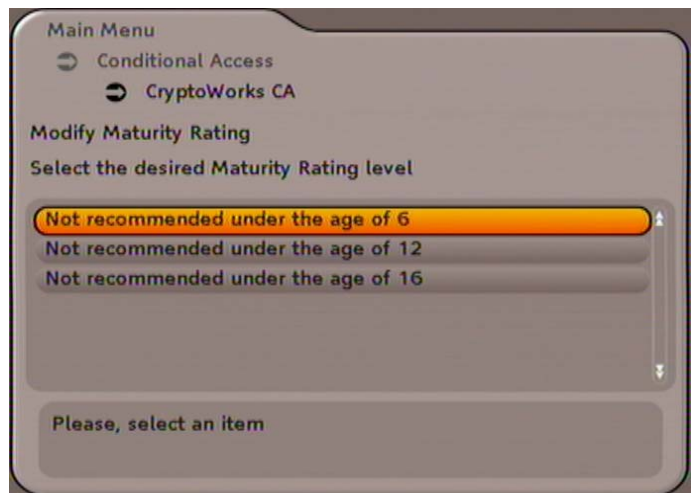
Use the ▲▼ buttons to select the desired minimum age. Press the OK button to acknowledge loading your selection (often the Smartcard PIN will be requested after changing the maturity rating).

CONDITIONAL ACCESS

CRYPTOWORKS - COMMON (CA MODULE)

This menu informs you which CA module is fitted to your receiver and which Smartcard is present in the CI

slot. Select the "CryptoWorks - Common" menu using the ⒧⒪ buttons and press the ⒪⒦ button to open it. You will then see the menu generated by the CA module.

The screenshots below depend on the specific module and card, and so are only intended as examples.

Note: *The module displays may be shown in English, even if you have selected German as the menu language, because the menu is generated directly by the module!*

```
Main Menu
  ⤷ Conditional Access / Common
       ⤷ Common Interface
Main menu of CryptoWorks CI module
Please select an item

 General Smartcard information
 Available entitlements
 Smart card management
 Language
 Check for new software


 CryptoWorks V4.00.008
```
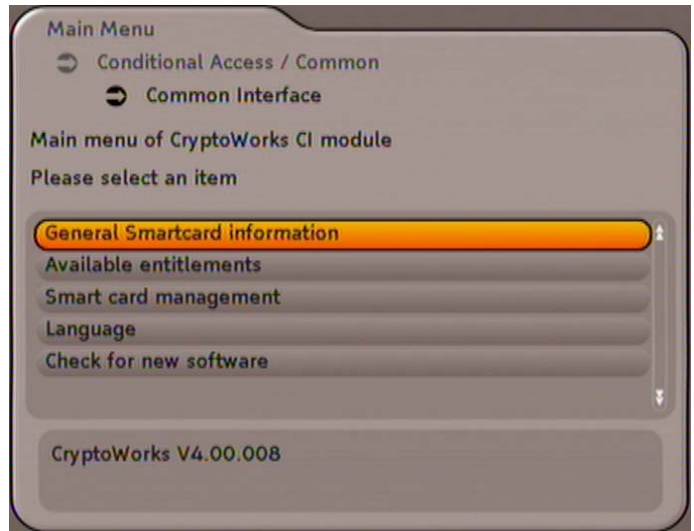
From this menu, your card and your PIN code allow you to access various channels from your Pay-TV provider.
"CryptoWorks" has been selected as an example here. The details can be different for each CA module. Always follow the instructions supplied by your Pay-TV provider.

Information for Conax, SECA, Viaccess and CryptoWorks users:
Note that with monthly activation intervals, the programme providers have different procedures for activating Pay-TV cards. Activation may therefore be a few days before or after the beginning of a new month. During this activation period, the CA module and card must be in the slot, and the receiver must be turned on a set to the booked Pay-TV channel. Follow the instructions from the Pay-TV provider.
If your Pay-TV card is then still not enabled, we recommend you briefly withdraw the CA module with the card out of the slot, with the receiver switched on, and then re-insert it.

This information has nothing to do with the properties of the receiver; it is merely intended to assist you.

The various items can be selected using the ⒧⒪ buttons and called up using the ⒪⒦ button. Press the

⒠⒳⒤⒯ button to exit the menu.

CONDITIONAL ACCESS
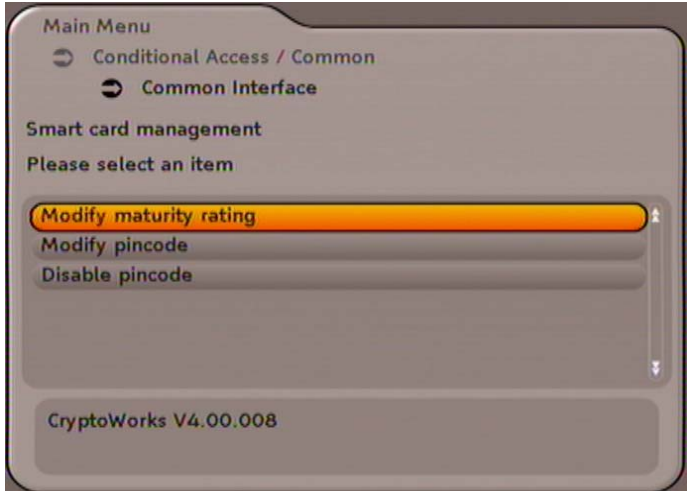
CHANGE MATURITY RATING

The screenshots below depend on the specific module and card, and so are only intended as examples.
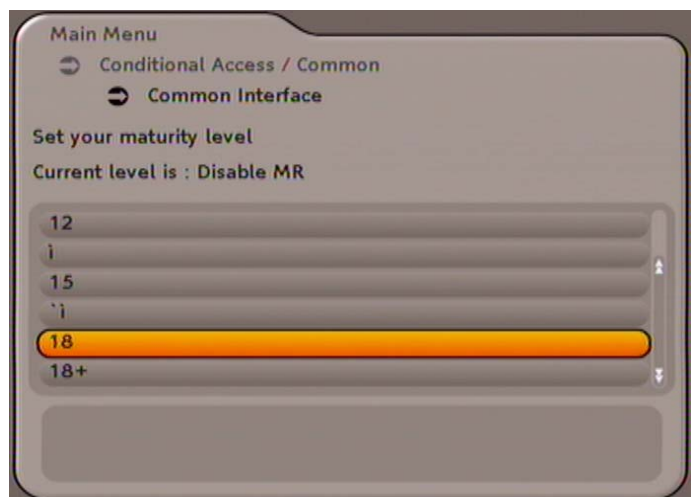
Use the ▲▼ buttons to select the "Smartcard management" menu, and press the OK button to open it. The following display appears (example):

Many CAM modules request you to set up the maturity rating when you insert the Smartcard. If you do not set up any maturity rating, you will see this notice again when next you select an encrypted channel.

In this case use the ▲▼ buttons to select the "Modify maturity rating" menu. If requested, enter the Smartcard PIN and confirm it by pressing the OK button. The following display appears:

Use the ▲▼ buttons to select the desired minimum age. Press the OK button to acknowledge loading your selection:

SOFTWARE UPDATE VIA INTERNET/SERVICE

SOFTWARE UPDATE VIA INTERNET

NOTE!   *Updating requires a PC and a software cable (RJ 11 to Sub-D 9-pin)!*

If there is a new software release for your DVB-C receiver you can download it from:

http://www.kathrein.de
under "Service/Software and Download/Receiver"

The website also provides information and tips on software updating via the receiver's RJ 11 data interface. The required cable (RJ 11 to RS 232) can be ordered from our service centre, ESC in Grassau, at the following address:

**ESC Electronic Service
Chiemgau GmbH
Bahnhofstraße 108**

83224 Grassau, Germany

Tel.:   +49 8641 9545-0
Fax: +49 8641 9545-35 & 9545-36
e-mail: service@esc-kathrein.de
Internet: http://www.esc-kathrein.de

Note: *Factory settings must be restored following a successful software download.*

SERVICE

If, despite reading this operating manual, you still have questions about getting started with the receiver or using it correctly, or if unexpected problems occur, please contact your specialist dealer.

TECHNICAL APPENDIX

TECHNICAL FEATURES

- Reception of digital cable TV and radio channels

- 2,000 channel memory positions

- 16-character alphanumeric display with status icons for indication of channel names and transmission information

- Conax and Cryptoworks decoding system embedded

- Common Interface for one CA module [1]

- Integrated Smartcard reader [1]

- Electronic programme guide (EPG) with detailed information [2]

- Suitable for software download via cable [3] and PC

- 4 favourite channel lists

- Automatic date and time generation via DVB data stream

- On Screen Display (OSD) in 9 languages (D, GB, F, I, E, CZ, TR, PL, P)

- 8 timers; can also be programmed from the EPG

- Language selection for multilingual broadcasts

- Optical and electrical audio output for Dolby Digital data stream (AC 3)

- Composite colour, Y/C and RGB signal output programmable via the Scart socket

- Cinch sockets for AV signal

- Videotext decoder with 800 page memory capacity and videotext generation

- Automatic 4:3 and 16:9 format recognition (choice of viewing format)

- Search for Channels

- Power switch

- An additional IR sensor can be connected

- Compatible with the UFO®*compact*-processing system

- Product package: Infrared remote control, batteries, operating manual, safety instructions, Scart cable, power supply cable

[1] CA module and Smartcards are not included with this product
[2] Only displayed if this information is broadcast by the programme provider
[3] Dependent on the cable network operator's structure

TECHNICAL APPENDIX

Type		UFC 762si	UFC 762sw
Order no./colour		20210101/silver	20210102/black
RF properties			
Input frequency range	MHz	47-862	
Input level range	dBµV		
Demodulation:		QAM 16, 32, 64, 128, 256	
TV system, video			
Modulation, FEC, demultiplexer		DVB-C standard	
Video resolution		CCIR 601 (720 x 576)	
Input data rate	MSymb/s	1.7-7, 15	
Decoding		MPEG-1 and 2 compatible	
Bit rate	MBit/s	1.5-15	
Frequency range	MHz	0.02-5	
Output voltage	V	1	
S/N	dB	> 53	
TV system, audio			
Decoding		MPEG-1 and 2, layer 1 and 2	
Sampling rate	kHz	32/44,1/48	
Frequency range	kHz	0.04-20	
Voltage	mV	770	
S/N	dB	> 65	
Memory			
Flash-RAM/SDRAM	MB	4/ 16	
Processor clock speed	MHz	150	
Power supply			
Power supply voltage	V/Hz	230 (± 10 %)/50	
Power consumption (power/standby)	W	22/< 2	
Connections			
RF input/output		IEC socket/pin	
TV/VCR output		2 x Scart sockets	
Video output		Cinch socket	
Audio output (analogue)		2 x Cinch sockets	
Audio digital output (electrical)		Cinch socket	
Audio digital output (optical)		Standard OWG (IEC 952)	
Data interface		RJ 11 socket	
Common Interface/Encryption system		1/Conax, Cryptoworks integrated	
General			
Permissible ambient temperature	°C	+5 to +40	
Dimensions (W x H x D)	mm	280 x 49 x 190	
Weight	kg	< 2	

Preliminary data. Technical data subject to change.

TECHNICAL APPENDIX

SCART SOCKET ASSIGNMENT

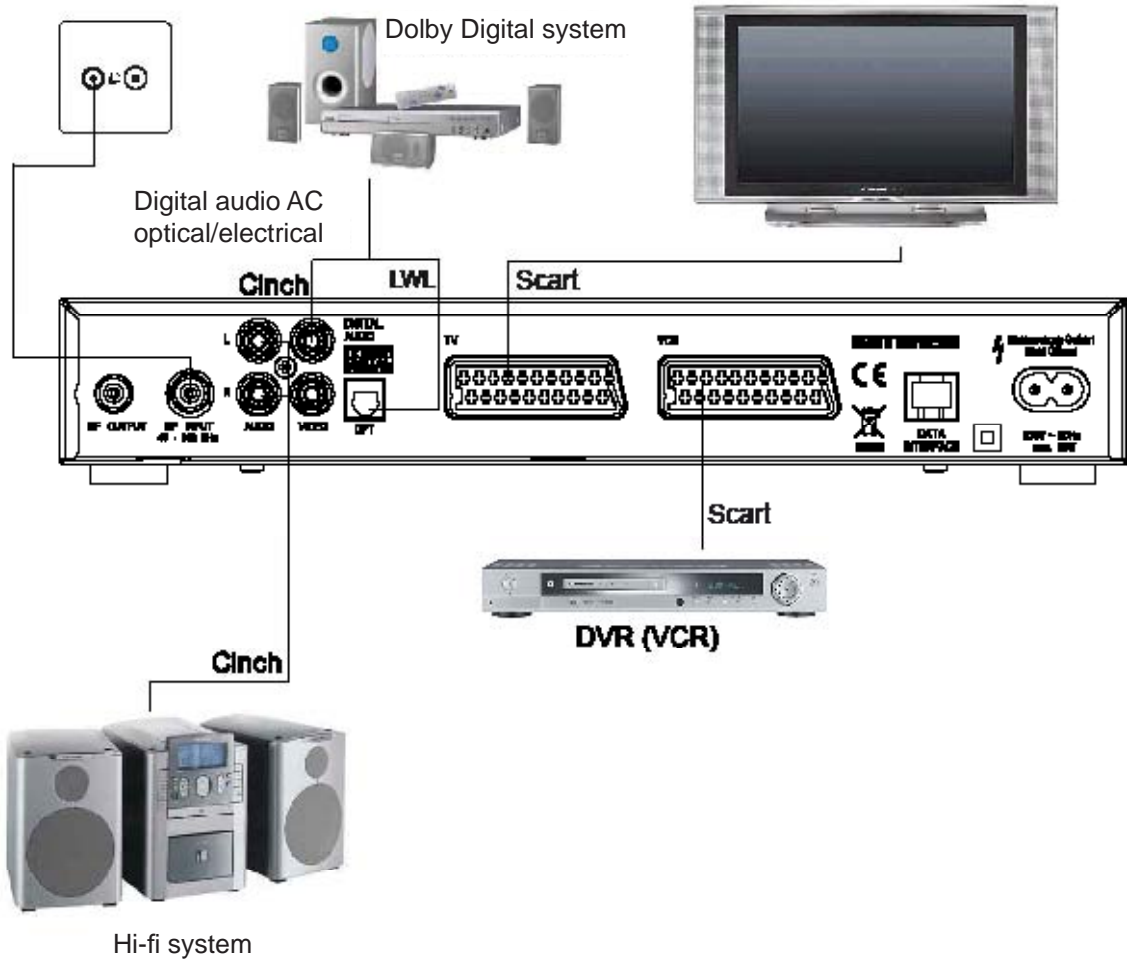| Signal	Pin no.	TV	VCR/AUX
Right audio output	1	X	X
Right audio input	2		X
Left audio output	3	X	X
Audio earth	4	X	X
Blue earth	5	X	X
Audio left input	6		X
Blue signal	7	X	X
Switching voltage	8	X	X
Green earth	9	X	X
Data signal	10		
Green signal	11	X	X
Data signal	12		
Red earth	13	X	X
Data earth	14		
Red signal (C)	15	X	X
Blanking signal	16	X	X
Video earth	17	X	X
Blanking signal earth	18	X	X
Video output (FBAS/Y)	19	X	X
Video input	20		X
Connector shield	21	X	X

VHS/S-VHS SWITCHING

The Scart sockets are switchable between VHS and S-VHS. The changeover is made by selecting "Main Menu", "Settings", "TV picture settings".

VHS (RGB):   The red signal is connected to terminal 15, the composite colour output to terminal 19.
For S-VHS (C/Y): The Y output is connected to pin 19, the C output to pin 15.

CONNECTION EXAMPLE

Dolby Digital system

Digital audio AC optical/electrical

Cinch · LWL · Scart

Scart

DVR (VCR)

Cinch

Hi-fi system

KATHREIN
Antennen · Electronic